

IN RE: VOLKSWAGEN “CLEAN  
DIESEL” MARKETING, SALES  
PRACTICES, AND PRODUCTS  
LIABILITY LITIGATION

This Document Relates to:

*Salt Lake County v. Volkswagen Group of America, Inc. et al., No. 16-cv-5649*

*Env. Prot. Comm'n of Hillsborough County v. Volkswagen, No. 16-cv-2210*

Case No. [15-md-02672-CRB](#)

**ORDER DENYING MOTION TO  
EXCLUDE AND GRANTING  
MOTION FOR SUMMARY  
JUDGMENT**

The Environmental Protection Commission of Hillsborough County, Florida and Salt Lake County, Utah (collectively, the Counties) contend that Defendants' (collectively, Volkswagen) post-sale software updates violated the anti-tampering regulations of Hillsborough County and Utah, respectively. See Rules of Envtl. Prot. Comm'n of Hillsborough County, Rule 1-8.05(1), (6); Utah Admin. Code § R307-201-4. In 2020, the Ninth Circuit held that these claims are not preempted by the Clean Air Act, even though they may lead to “staggering” liability. In re Volkswagen “Clean Diesel” Mktg., Sales Pracs., & Prods. Liab. Litig., 959 F.3d 1201, 1225–26 (9th Cir. 2020).

After denying a remand to the transferor courts, the Court ordered briefing on whether the post-sale software update is divisible under the Counties' laws. See Order on Mot. to Remand (dkt. 7944). After a hearing, the Court held that “any modification or alleged tampering that was accomplished at one time is indivisible and can qualify as only one instance of tampering under the relevant regulations.” Order re: Software Divisibility

1 (dkt. 8003) at 2. In that order, the Court echoed its statements at the hearing that “[t]he  
2 next issue to be resolved is whether the post-sale software modification in this case  
3 violated the Counties’ regulations by increasing vehicle emissions relative to emissions  
4 before the modification.” Id. The Court ordered immediate discovery on the “net  
5 emissions effect of the post-sale software” and then a summary judgment motion on that  
6 issue. Id.

7 In September, after the parties began briefing Volkswagen’s motion for summary  
8 judgment, in lieu of a reply, Volkswagen filed a “motion to exclude arguments regarding  
9 emissions other than NO<sub>x</sub>.” VW Mot. to Exclude (dkt. 8044). Volkswagen sought “an  
10 order that the Counties may not transform this nearly seven-year-old action, which has  
11 always been about NO<sub>x</sub> emissions, into a fishing expedition about other emissions.” Id. at  
12 1.

13 In October, the Court resolved Volkswagen’s “motion to exclude,” holding that the  
14 Counties did not plead that Volkswagen was responsible for any excess emissions other  
15 than NO<sub>x</sub>, precluding their arguments regarding other emissions in opposition to  
16 Volkswagen’s motion for summary judgment. Order on Mot. to Exclude (dkt. 8071).  
17 However, the Court allowed the Counties to move to amend their complaints to add those  
18 allegations. Id. After two rounds of briefing and a hearing, the Court denied the Counties’  
19 motions to amend, and ordered the parties to restart summary judgment briefing. See  
20 Order Denying Mots. to Amend (dkt. 8128). In addition to filing amended oppositions, the  
21 Counties also filed a motion to exclude the opinion of Ryan Harrington, Volkswagen’s  
22 expert on their NO<sub>x</sub> emission testing. Counties’ Mot. to Exclude (dkt. 8137).

23 Without any evidence of an increase in non-NO<sub>x</sub> emissions (or NO<sub>x</sub> emissions) to  
24 fall back on, the Counties ground most of their arguments on their view that their  
25 regulations impose liability even if the post-sale software update reduced emissions, as  
26 Volkswagen argues occurred here. This is against a commonsense reading of both

provisions, and the Court’s oft-stated interpretation of them.<sup>1</sup> In their oppositions and at the April 21 hearing on the motion, the Counties again—and at length—attempted to relitigate this issue. See SLC Opp’n (dkt. 8135) at 6–10; EPC Opp’n (dkt. 8136) at 9–20.

That attempt fails, as set forth below, and the Counties’ other arguments, as well as their motion to exclude, fare no better. Accordingly, the Court DENIES the Counties’ motion to exclude and GRANTS Volkswagen’s motion for summary judgment.<sup>2</sup>

## I. BACKGROUND

### A. Original Defeat Device

Beginning in 2009, Volkswagen installed a defeat device in 585,000 diesel cars that it manufactured and sold in the United States, which was able to detect whether vehicles were undergoing emissions testing or being driven normally on the road. In re Volkswagen, 959 F.3d at 1207–08. The device caused the vehicles to emit NO<sub>x</sub> at levels up to 40 times higher than the federal limit. Id. at 1208. Volkswagen hid the existence of the defeat device and misrepresented to regulators that its vehicles complied with emissions standards. Id.

### B. Software Updates

As relevant here, Volkswagen modified its defeat device to remedy hardware failures that developed in certain of its diesel vehicles in or around 2012. Id.; see also Rule

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<sup>1</sup> See Order Denying Remand at 2 (noting that further MDL proceedings would be helpful because both regulations “appear to exclude from liability post-sale changes that reduce emissions”); Tr. of July 15, 2022 hearing (dkt. 8013) at 39 (“I want to encourage discovery to go forward . . . with the sole goal in mind of making the determination as to whether . . . the implementation of the software modification had the net effect—what was the net effect of the emissions changes.”); Order re: Software Divisibility (ordering briefing on the “net emissions effect of the post-sale software” because that would determine liability); Order Denying Certification to the Utah Supreme Court (dkt. 8025) (“[T]he Court has already ruled” as to “the clear answer” that the Utah rule does not apply to changes that reduce emissions “because the text . . . is straightforward.”).

<sup>2</sup> The Court notes that Salt Lake brings three additional claims in its operative complaint—for fraud, noncompliance with Utah’s RICO law, and public nuisance. See SLC Compl. (dkt. 4456) ¶¶ 58–78. However, the parties agreed at the hearing on this motion that the Counties’ claims rise and fall with the Court’s interpretation of their respective regulations, and this order should resolve the entire dispute as a matter of judicial economy. See Tr. of April 21, 2023 hearing (dkt. 8164) at 3–7. The Court therefore treats Volkswagen’s motion as one for summary judgment, rather than “partial” summary judgment, as it was originally noticed.

1 11 Plea Agreement, Statement of Facts ¶ 47, United States v. Volkswagen AG, 16-cr-  
2 20394 (E.D. Mich. Jan. 11, 2017) (“Plea Agreement”). The company hypothesized that  
3 the failures were the result of a glitch with the defeat device, whereby the vehicles were  
4 staying in testing (or “dyno”) mode even when driven on the road, which was placing  
5 increased stress on the vehicles’ exhaust systems. Plea Agreement ¶ 47. To solve the  
6 problem, the company implemented two software updates: the first caused the vehicle to  
7 start in street mode rather than dyno mode; and the second, the “steering wheel angle  
8 recognition” feature, “interacted with the [defeat device] by enabling the vehicles to detect  
9 whether [they] were being tested on a dynamometer (where the steering wheel is not  
10 turned), or being driven on the road.” Id. ¶ 49. After a Volkswagen supervisor authorized  
11 activation of this feature, in or around April 2013, Volkswagen employees “installed the  
12 new software function in new 2.0 Liter Subject Vehicles being sold in the United States,  
13 and later installed it in existing 2.0 Liter Subject Vehicles through software updates during  
14 maintenance.” Id. ¶ 50.

15 **C. CARB Testing**

16 After independent, on-road testing conducted by West Virginia University’s Center  
17 for Alternative Fuels, Engines, and Emissions (“WVU”) confirmed significantly elevated  
18 levels of NO<sub>x</sub> emissions from Volkswagen vehicles, EPA and CARB began to investigate.  
19 See In re Volkswagen, 959 F.3d at 1208. In October 2014, Volkswagen delivered a  
20 presentation to CARB and EPA showing results from on-road A-to-B PEMS testing that it  
21 had undertaken to show that its software updates had decreased NO<sub>x</sub> emissions on the  
22 road, while still concealing that the defeat device was the explanation for the elevated NO<sub>x</sub>  
23 levels uncovered by WVU’s testing. Plea Agreement ¶ 58; Menillo Decl. Ex. E (dkt.  
24 8010-6); Harrington Rep. (dkt. 8010-5) at 38. Taking Volkswagen’s claims “with a grain  
25 of salt,” CARB decided to conduct its own confirmatory testing to “evaluate the  
26 effectiveness of their corrective action for the high NO<sub>x</sub> conditions discovered by West  
27 Virginia University.” Hebert Dep. (dkt. 8010-10) at 143; Menillo Decl. Ex J. (dkt. 8010-  
28 11). CARB’s test plan included two vehicles (one Gen-1 and the other Gen-2) that would

1 be tested both on a dynamometer and on the road (on two routes), and then flashed with  
2 the software update and tested again. Menillo Decl. Ex. J.; Harrington Rep. at 41; Carder  
3 Rep. at 12. Though CARB completed its A-to-B testing on the Gen-2 vehicle, it did not  
4 complete its testing on the Gen-1 vehicle, because, by that point, Volkswagen had admitted  
5 to installing the defeat device, and CARB’s focus had shifted away from testing the  
6 effectiveness of the updates. Harrington Rep. at 43. Nevertheless, the testing that CARB  
7 did complete showed a modest improvement in NO<sub>x</sub> emissions. See Menillo Decl. Ex. K  
8 (dkt. 8010-12); CARB Notice of Violation (dkt. 8010-2) (stating that “[o]ver-the-road  
9 PEMS testing showed that the recall calibration did reduce the emissions to some degree  
10 but NO<sub>x</sub> emissions were still significantly higher than expected”).

#### 11           **D. Volkswagen’s Testing**

12           While this litigation was ongoing, Volkswagen hired Exponent, an engineering  
13 consulting firm, and Ryan Harrington, a principal at the firm, to conduct testing “designed  
14 to isolate effect of the Recall Update on overall tailpipe NO<sub>x</sub> emissions” and “to confirm—  
15 and expand upon—CARB’s test program.” Harrington Rep. at 51. The test program  
16 included seven vehicles (four Gen-1 and three Gen-2), tested over three routes—two of  
17 which were designed to approximate CARB’s routes from its test plan, and an additional  
18 “city” route with “stop-and-go” urban driving to approximate a route from WVU’s testing.  
19 Id. at 53–54. This testing showed reductions in NO<sub>x</sub> emissions across test routes and  
20 vehicles, see Harrington Rep. 60–64, and forms the basis of the instant motion for  
21 summary judgment, as well as the Counties’ motion to exclude.

22           This order addresses the Counties’ motion to exclude first, and then Volkswagen’s  
23 motion for summary judgment.

#### 24           **II. MOTION TO EXCLUDE**

##### 25           **A. Legal Standard**

26           Expert testimony is admissible if it is relevant and reliable. Daubert v. Merrill Dow  
27 Pharms., Inc., 509 U.S. 579, 589 (1993). Rule 702 of the Federal Rules of Evidence  
28 provides that experts may give opinions based on “scientific, technical, or other specialized

knowledge” if such testimony would “help the trier of fact to understand the evidence or to determine a fact in issue.” See Fed. R. Evid. 702. The testimony must be “based on sufficient facts or data” and “the product of reliable principles and methods,” and “the expert [must have] reliably applied the principles and methods to the facts of the case.” Id. Trial courts are to act as gatekeepers, making certain “that an expert . . . employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” See Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137, 147, 152 (1999). A trial court’s gatekeeping function applies not only to scientific testimony but to all expert testimony. Id. at 147. The admissibility of an expert opinion is a flexible inquiry: “whether Daubert’s specific factors are, or are not, reasonable measures of reliability in a particular case is a matter that the law grants the trial judge broad latitude to determine.” Id. at 153. The general rule is that “[s]haky but admissible evidence is to be attacked by cross examination, contrary evidence, and attention to the burden of proof, not exclusion.” Primiano v. Cook, 598 F.3d 558, 564 (9th Cir. 2010) (citing Daubert, 509 U.S. at 596).

## **B. Discussion**

The Counties make three arguments in support of their motion to exclude: First, Harrington is unqualified to offer opinions on or analysis of PEMS test data; second, Harrington’s opinions are unreliable based on criticisms of the Harrington’s and Exponent’s testing methodology; and third, that Harrington’s testing is irrelevant based on the Counties’ reading of the governing law.

### **1. Qualifications**

Relying on an opinion excluding Harrington’s testimony related to PEMS testing in Counts v. General Motors, LLC, 606 F. Supp. 3d 547 (E.D. Mich. 2022), the Counties argue that Harrington “does not possess the required qualifications to render an opinion specific to PEMS testing or data analysis.” Counties’ Mot. to Exclude at 5. This is because “while Mr. Harrington has an impressive background in automotive and mechanical engineering, he ‘has no education, training, or experience specific to PEMS

1 emissions testing or data analysis.”” Id. (quoting Counts, 606 F. Supp. 3d at 585).

2 The Counties mischaracterize Harrington’s experience and misapply the Ninth  
3 Circuit’s Daubert standard. “The threshold for qualification is low for purposes of  
4 admissibility; minimal foundation of knowledge, skill, and experience suffices.” Victorino  
5 v. FCA US LLC, No. 16–CV–1617GPC, 2018 WL 2551312, at \*4 (S.D. Cal. June 4,  
6 2018) (quoting PixArt Imaging, Inc. v. Avago Tech. Gen. IP (Singapore) Pte. Ltd., No. 10–  
7 cv-0544, 2011 WL 5417090, at \*4 (N.D. Cal. Oct. 27, 2011)). “So long as the expert’s<sup>1</sup>  
8 testimony is ‘within the reasonable confines of his subject area,’” In re Roundup Prods.  
9 Liab. Litig., 390 F. Supp. 3d 1102, 1112–13 (N.D. Cal. 2018) (quoting Avila v. Willits  
10 Env’t Remediation Tr., 633 F.3d 828, 839 (9th Cir. 2011)), “lack of particularized  
11 expertise goes to the weight accorded [an expert’s] testimony, not to the admissibility of  
12 her opinion as an expert.” Ramirez v. ITW Food Equip. Grp., LLC, 686 F. App’x 435,  
13 441 (9th Cir. 2017) (quoting United States v. Garcia, 7 F.3d 885, 890 (9th Cir. 1993)).

14 Harrington has had a long career in automotive engineering, evaluation, and  
15 policymaking, with “extensive experience in performing analyses on emissions testing,  
16 developing regulatory standards, and studying fuel efficiency through his work at DOT  
17 and in the private sector.” See also Bledsoe v. FCA US LLC, No. 416CV14024TGBRSW,  
18 2022 WL 4596156, at \*14 (E.D. Mich. Sept. 30, 2022); see also Harrington Rep. App. A.  
19 While Harrington does not have a long history of conducting PEMS testing, he has  
20 extensive experience analyzing emissions data, including analyzing chassis dynamometer  
21 test data, which is closely related to PEMS data. Harrington Dep. (dkt. 8149-2) at 18, 25.  
22 The Counties, relying on Counts, argue that Harrington’s lack of extensive experience  
23 conducting PEMS testing and analyzing PEMS data specifically should require the  
24 exclusion of his testimony. See Counties’ Mot. to Exclude at 6. But analysis of emissions  
25 data is clearly “within the reasonable confines of [Harrington’s] subject area,” which is  
26 automotive engineering, with a particular specialty in fuel efficiency and emissions  
27 analysis. Roundup, 390 F. Supp. 3d at 1112–13; Harrington Rep. at 7–8. That Harrington  
28 does not have extensive experience designing PEMS test routes or installing PEMS

1 equipment goes to the weight of his testimony, rather than its admissibility. See Ramirez,  
 2 686 F. App'x at 441. To the extent the Counts decision conflicts with this determination, it  
 3 applies a much more rigid qualification standard than courts in the Ninth Circuit are bound  
 4 to apply.<sup>3</sup>

## 5           **2. Reliability**

6           Under Daubert and Rule 702, expert testimony is reliable “if the knowledge  
 7 underlying it has a reliable basis in the knowledge and experience of the relevant  
 8 discipline.” Primiano, 598 F.3d at 565 (quoting United States v. Sandoval-Mendoza, 472  
 9 F.3d 645, 654 (9th Cir. 2006)). The factors bearing on the reliability inquiry include  
 10 “testability, publication in peer reviewed literature, and general acceptance, but the inquiry  
 11 is a flexible one.” Id. at 564.

12           While the Counties (and their experts) bring many challenges to Harrington and  
 13 Exponent’s design of their PEMS test, ultimately, their only challenge that could rise to the  
 14 level of exclusion is that A-to-B PEMS tests are an inherently unreliable method of  
 15 measuring changes in emissions output: “PEMS tests on the road are not suitable for  
 16 comparisons to the much more accurate lab tests, due to a high level of variability of on-  
 17 road testing.” Counties’ Mot. to Exclude at 9. But Harrington and Exponent’s test was not  
 18 intended to be compared to lab tests—rather, they were compared to another PEMS test  
 19 run on the same route, in the same conditions, with the only alteration being the software  
 20 in use. See Harrington Rep. at 51; see also Hebert Dep. at 61–63 (explaining the  
 21 methodology of their A-to-B PEMS testing). Indeed, the test was meant to attempt to

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22  
 23           <sup>3</sup> In Counts, General Motors also sought to admit Harrington’s testimony for a different purpose  
 24 than VW seeks to admit it here. In Counts, Harrington was retained to assess and critique the  
 25 PEMS testing and analysis conducted by the opposing party’s experts—in effect, what Plaintiffs  
 26 have retained their experts to do here. See Counts, 606 F. Supp. 3d at 584; Carder Rep. (dkt.  
 27 8039-5); Will Rep. (dkt. 8041-3). In this case, Harrington’s report analyzes data from a testing  
 28 program Exponent designed “to confirm—and expand upon—CARB’s test program in a few key  
 aspects.” Harrington Rep. at 51. While Harrington had some input into the test plans by  
 “provid[ing] some recommendations on additional testing that . . . should be done,” Harrington  
 Dep. at 26–27, his primary role was to analyze emissions data, which he is clearly qualified to do,  
 rather than critique the design and analysis of another expert’s PEMS test, which the Counts court  
 held that he was unqualified to do.

1 replicate and expand upon the A-to-B PEMS tests designed by CARB—whose  
2 qualifications and methodologies the Counties do not seek to challenge. While no doubt  
3 introducing more variables than a cloistered lab environment, PEMS testing is clearly a  
4 generally accepted method of measuring emissions output in an on-road environment, see,  
5 e.g., Menillo Decl. Ex. G (8010-8) (WVU PEMS test); Menillo Decl. Exs. J–K (CARB  
6 PEMS test), and the Counties concede that Harrington’s results are retestable. See  
7 Counties’ Mot. to Exclude at 8.<sup>4</sup>

8 The Counties’ other challenges to VW’s methodology effectively fall into three  
9 categories:

10 First, the Counties’ challenge Harrington’s collection of NO<sub>x</sub> emission data without  
11 collecting other emission data. See id. at 7–8. But the Court has already held that VW  
12 was not obligated to collect other emission data, because the Counties did not plead an  
13 increase in any emission other than NO<sub>x</sub>. See Order Denying Mots. to Amend at 4–5;  
14 Order on Mot. to Exclude.

15 Second, the Counties contend that Harrington’s test reports were incomplete, not  
16 reporting vehicle types, numbers, software version, or data such as “soak durations” or  
17 engine start temperatures. Mot. to Exclude at 9. VW has convincingly rebutted these  
18 contentions. See Monahan Decl. (dkt. 8149-1) ¶¶ 4–7. But regardless, if the Counties  
19 have already conceded that Harrington’s experiment is retestable, then presumably any  
20 discrepancies they have found are minor, or, at the very least, would not preclude them  
21 from checking his work.

22 Third, the Counties argue that Harrington “ignored nearly half of the test results as  
23 ‘invalid,’” because regeneration events occurred during those test runs. Mot. to Exclude at  
24 8–9. But as Volkswagen points out, it would defeat the purpose of an A-to-B comparison  
25 to compare the result of a test run in which a regeneration event occurred to one in which

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26  
27 <sup>4</sup> Indeed, VW offered the Counties the opportunity to run their own PEMS test to check  
28 Harrington’s results for themselves. See dkt. 8044-2. The Counties declined. See dchts. 8044-3,  
8044-4.

1 no regeneration event occurred. Opp'n to Mot. to Exclude (dkt. 8149) at 14. And in any  
 2 case, Volkswagen apparently produced the results of every test, including the "invalid"  
 3 ones, to the Counties in discovery, and they had every opportunity to do their own  
 4 analysis, incorporating the data from the "invalid" test runs. See Monahan Decl. ¶ 5.<sup>5</sup>

5 The Counties' other criticisms amount to small alterations they (and their experts)  
 6 would have made to the test protocol, such as testing at lower ambient temperatures.  
 7 These criticisms "go to the weight of the testimony . . . , not its admissibility." Alaska  
 8 Rent-A-Car, Inc. v. Avis Budget Grp., Inc., 738 F.3d 960, 970 (9th Cir. 2013). And as  
 9 already discussed, Volkswagen offered the Counties the opportunity to conduct a test using  
 10 their preferred methods and the Counties did not take it. See supra note 4.

### 11           **3. Relevance**

12 Finally, the Counties argue that Harrington's testimony must be excluded because it  
 13 is irrelevant, because liability under neither regulation at issue is premised upon "an  
 14 analysis of actual emissions levels." Mot. to Exclude at 8–9. This is based on the  
 15 Counties chosen interpretations of Utah Admin. Code § R307-201-4 and EPC Rule 1-8.05,  
 16 discussed more thoroughly in the next section. It suffices to say here that evidence of the  
 17 updates' effect on NO<sub>x</sub> emissions—which was the question in the case the Court ordered  
 18 the parties to resolve on summary judgment back in July—is unquestionably relevant to  
 19 liability under the regulations at issue.

20 Accordingly, because Harrington's testimony meets the requirements of Daubert  
 21 and Rule 702, the Counties' motion to exclude is denied.

## 22           **III. MOTION FOR SUMMARY JUDGMENT**

### 23           **A. Legal Standard**

24 Summary judgment is appropriate "if the movant shows that there is no genuine  
 25 dispute as to any material fact and the movant is entitled to judgment as a matter of law."

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26  
 27           <sup>5</sup> The Counties might have persuasively argued, during the first round of briefing on  
 28 Volkswagen's motion in September, that they did not have time to do their own data analysis  
 during the short discovery period. But they had five additional months to analyze the data from  
 Harrington's tests with their experts and do not appear to have done so.

1 Fed. R. Civ. P. 56(a); see also Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986). A  
2 genuine issue of fact is one that could reasonably be resolved in favor of either party. See  
3 Celotex, 477 U.S. at 322–23. A dispute is “material” only if it could affect the outcome of  
4 the suit under the governing law. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248–49  
5 (1986).

6 “A moving party without the ultimate burden of persuasion at trial—usually, but not  
7 always, a defendant—has both the initial burden of production and the ultimate burden of  
8 persuasion on a motion for summary judgment.” Nissan Fire & Marine Ins. Co. v. Fritz  
9 Cos., Inc., 210 F.3d 1099, 1102 (9th Cir. 2000) (citing 10A Charles Alan Wright, Arthur  
10 R. Miller & Mary Kay Kane, Federal Practice and Procedure § 2727 (3d ed. 1998)). “In  
11 order to carry its burden of production, the moving party must either produce evidence  
12 negating an essential element of the nonmoving party’s claim or defense or show that the  
13 nonmoving party does not have enough evidence of an essential element to carry its  
14 ultimate burden of persuasion at trial.” Id. (citing High Tech Gays v. Def. Indus. Sec.  
15 Clearance Off., 895 F.2d 563, 574 (9th Cir. 1990)). “If a moving party fails to carry its  
16 initial burden of production, the nonmoving party has no obligation to produce anything.”  
17 Id. at 1102–03. “If, however, a moving party carries its burden of production, the  
18 nonmoving party must produce evidence to support its claim or defense.” Id. at 1103. “If  
19 the nonmoving party fails to produce enough evidence to create a genuine issue of material  
20 fact, the moving party wins the motion for summary judgment.” Id. “But if the  
21 nonmoving party produces enough evidence to create a genuine issue of material fact, the  
22 nonmoving party defeats the motion.” Id.

23           **B. Discussion**

24           The Counties make three broad arguments against summary judgment: First, neither  
25 regulation requires that the software updates increase NO<sub>x</sub> emissions for liability to attach;  
26 second, Volkswagen has failed to meet its burden to demonstrate that the updates  
27 decreased NO<sub>x</sub> emissions; and third, because the Counties require additional discovery  
28 under Rule 56(d), the Court should allow additional discovery prior to ruling on

1 Volkswagen's motion.

2           **1. Effect of NOx Emissions Reduction on Liability**

3           Despite the Court's many prior statements on the issue, the Counties argue that  
4 neither EPC Rule 1-8.05 nor Utah Admin Code § R307-201-4 require that the software  
5 updates increase emissions for liability to attach. See SLC Opp'n at 6–10; EPC Opp'n at  
6 9–20. While the Counties offer few new arguments on this point, and no successful ones,  
7 the Court addresses them in full below.

8           **a. EPC Rule 1-8.05**

9           Hillsborough seeks to hold Volkswagen liable for violations of two of its Rules:  
10 Section 1-8.05(1) and Section 1-8.05(6). Hillsborough argues that neither Section 1-  
11 805(1) nor 1-8.05(6) require increased emissions for liability to attach. EPC Opp'n at 9–  
12 15.

13           **i. Rule 1-8.05(1)**

14           EPC Rule Section 1-8.05(1) provides: “No person shall tamper, cause, or allow the  
15 tampering of the emission control system of any motor vehicle.” EPC Rule § 1-8.05(1).  
16 Section 1-8.03(2)(h) defines “tampering” as “the intentional inactivation, disconnection,  
17 removal or other modification of a component or components of the emission control  
18 system resulting in it being inoperable.” EPC Rule § 1-8.03(2)(h). Section 1-8.03(2)(c)  
19 defines “inoperable emission control system” as “any emission control system or  
20 component thereof whose operation or efficiency has been circumvented, defeated, or  
21 deleteriously affected by improper maintenance, improper up-keep, wear and tear,  
22 misfueling, or tampering.” EPC Rule § 1-8.03(2)(c).

23           Hillsborough argues that because the rule prohibits “circumvent[ing]” the  
24 “operation or efficiency” of an “emission control system” just as it prohibits “defeat[ing]”  
25 or “deleteriously affect[ing]” it, then an increase in emissions is not required. EPC Opp'n  
26 at 10–11. Simply put, under Hillsborough’s reading of the Rule, the “operation or  
27 efficiency” of an “emissions control system” can be “circumvented” even if emissions are  
28 reduced due to that “circumvent[ion].” This is a strained interpretation that does not hold

1 up to scrutiny of the Rule as a whole: If the Rule penalizes activities that “defeat[]” or  
2 “deleteriously affect[]” an emission control system—both of which indicate that the  
3 emissions control system must be harmed in some way—then it cannot follow that  
4 “circumvent[]” does not require any similar harm, or “circumvent[]” would swallow  
5 “defeat[]” or “deleteriously affect[].” Rather, the plain reading of this rule requires that to  
6 be “inoperable,” the vehicle’s emission control system must “render the system even less  
7 functional than it had been” before the update was installed. Env’t Prot. Comm’n of  
8 Hillsborough County v. Mercedes-Benz USA, LLC, No. 8:20-CV-2238-VMC-JSS, 2022  
9 WL 1136610, at \*5 (M.D. Fla. Apr. 18, 2022). At the very least, to be “tampering,” a  
10 software update must make the situation worse, not better.

**ii. Rule 1-8.05(6) and the “Reinstalation” Theory**

EPC Rule Section 1-8.05(6) provides: “No person shall manufacture, install, sell or advertise for sale, devices to defeat or render inoperable any component of a motor vehicle’s emission control system.” Hillsborough argues that, even if Volkswagen’s interpretation of Section 1-8.05(1) is correct, there is still liability under Section 1-8.05(6), because the defeat device was reinstalled when the software updates at issue were installed. EPC Opp’n at 13–15.

This argument fails for myriad reasons. First, this “reinstallation” theory was not alleged in Hillsborough’s operative complaint, and the Court denied Hillsborough’s attempt to amend its complaint to add this theory. See Order Denying Mots. to Amend at 12 n.8. Thus, Hillsborough seeks to bring a new theory of liability through a side door.

But the “reinstallation” theory nonetheless fails on its merits. Despite Hillsborough’s best interpretive efforts, “devices to defeat” and “devices to render inoperable,” have effectively the same meaning under Rule 1-8.05(6), because the Rule’s definition of “inoperable” includes “defeat.” See EPC Rule § 1-8.03(2)(c) (defining an “inoperable emission control system” as “any emission control system . . . whose operation . . . has been . . . defeated . . . by improper maintenance, improper up-keep, wear and tear, misfueling, or tampering”). Thus, just as liability cannot attach under EPC Rule § 1-

<sup>6</sup> 8.05(1) if emissions have been reduced, so too under Rule § 1-8.05(6).<sup>6</sup>

This conclusion does not change even if the “original” defeat device was “reinstalled” when the post-sale updates were installed. As discussed above, the thrust of Rule 1-8.05(6) is that a component of the vehicle’s emission control system has been “defeated” or “rendered inoperable” by the installation of the device. That was certainly true when the original defeat device was installed in the pre-sale vehicles, and the vehicle’s NO<sub>x</sub> emissions went through the roof. But, of course, the Counties are preempted from holding Volkswagen liable for the installation of that original defeat device under their anti-tampering regulations. See In re Volkswagen, 959 F.3d at 1217–18. The post-sale software update that followed—which may have indeed included the “original” defeat device—also included additional updates that, as Volkswagen persuasively demonstrates, reduced NO<sub>x</sub> emissions, though not enough to come within federal standards. Because the Court has already held that the software update constitutes a single, indivisible whole, see Order re: Software Divisibility, any reinstallation of the “original” defeat device as a part of the post-sale software update does not constitute a separate violation of Rule 1-8.05(6) if, taken as a whole, the software update reduced emissions.

Therefore, under either Rule 1-8.05(1) or Rule 1-8.05(6), there is no liability if the update resulted in a decrease in NO<sub>x</sub> emissions.

**b. Utah Admin. Code § R307-201-4**

Utah Admin Code § R307-201-4 provides:

<sup>6</sup> Hillsborough's affidavit from the Senior Environmental Manager of the EPC, Jeff Sims, does not change the Court's conclusion as to the meaning and requirements of Rule 1-8.05. See Sims Aff. (dkt. 8136-2). Deference to an agency interpretation of a regulation is only appropriate where the regulation is "genuinely ambiguous," and this one is not: There is "only one reasonable construction" of Rule 1-8.05, as discussed above. See Kisor v. Wilkie, 139 S. Ct. 2400, 2415 (2019); see also Idaho Dep't of Health & Welfare v. U.S. Dep't of Energy, 959 F.2d 149, 152–53 (9th Cir. 1992) (granting no deference to a state's interpretation of its own regulation where it cannot be reconciled with that regulation's plain reading). In any case, even if the rule was not "genuinely ambiguous," there is no reason for the Court to defer to an affidavit filed along with an opposition to summary judgment, which is more likely to reflect a "convenient litigating position" than a "fair and considered judgment." Kisor, 139 S. Ct. at 2417 (internal quotation marks and citations omitted); see also Idaho Dep't of Health & Welfare, 959 F.2d at 153 ("We grant no deference to an interpretation put forth merely as a litigation position.").

Any person owning or operating any motor vehicle or motor vehicle engine registered or principally operated in the State of Utah on which is installed or incorporated a system or device for the control of crankcase emissions or exhaust emissions in compliance with the Federal motor vehicle rules, shall maintain the system or device in operable condition and shall use it at all times that the motor vehicle or motor vehicle engine is operated. No person shall remove or make inoperable the system or device or any part thereof, except for the purpose of installing another system or device, or part thereof, which is equally or more effective in reducing emissions from the vehicle to the atmosphere.

Volkswagen argues that because the updates reduced (or at least did not increase) NO<sub>x</sub> emissions, then the updates fall into the “safe harbor” provision of the statute, because they were “equally or more effective in reducing emissions from the vehicle to the atmosphere.” Mot. for Summary Judgment (dkt. 8010) at 2 (quoting Utah Admin. Code § R307-201-4). Salt Lake contends that the “safe harbor” provision does not apply to the updates, because: (1) the updates were not installed “for the purpose of” reducing emissions; and (2) the updates did not bring NO<sub>x</sub> emissions within federal standards. SLC Opp’n at 6–10.<sup>7</sup> Both arguments fail.

**i. “for the purpose of”**

Salt Lake first argues that because the updates were not installed “for the purpose of” reducing emissions, liability still attaches even if they did, in fact, reduce emissions. Regardless of the ultimate “purpose” of the updates, Salt Lake’s interpretation is at odds with the plain meaning of the provision.

“No person shall remove or make inoperable the system or device or any part thereof, except for the purpose of installing another system or device, or part thereof, which is equally or more effective in reducing emissions from the vehicle to the

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<sup>7</sup> Salt Lake also argues that because the post-sale updates “expanded the existing defeat device to improve its precision,” then those updates made the system inoperable. SLC Opp’n at 9. But this argument fails for an even more simple reason: it erases the safe harbor provision from the rule entirely. If the updated “system or device” is “equally or more effective in reducing emissions from the vehicle to the atmosphere,” then no liability attaches. Utah Admin Code § R307-201-4.

atmosphere.” Utah Admin. Code § R307-201-4 (emphasis added). “For the purpose of” clearly modifies “installing,” not “reducing emissions.” The next phrase makes this plain meaning even clearer: It requires that the other “system or device” installed be “equally or more effective in reducing emissions.” *Id.* If the Court were to accept Salt Lake’s interpretation, this second provision would be superfluous: If the law granted a safe harbor to an intent to reduce emissions—rather than an actual reduction in emissions—it would be meaningless for the new system to be “equally or more effective in reducing emissions” than the old one.

**ii. Update Did Not Decrease Emissions Below Federal Standards**

Salt Lake further argues that Volkswagen cannot take advantage of the safe harbor provision because the updates did not bring emissions within federal minimum standards. See SLC Opp'n at 9–10. The Court has already opined on this issue. See Order Denying Motion to Certify to the Utah Supreme Court (dkt. 8025). But even if it had not, the text of the “safe harbor” provision is clear: A person may “install[] another system or device . . . which is equally or more effective in reducing emissions from the vehicle to the atmosphere” without incurring liability under the provision. Utah Admin. Code § R307-201-4. The safe harbor says nothing about compliance with federal minimum standards, and the Court declines to read such a requirement into an otherwise straightforward rule.

Salt Lake contends that the Court must read the first sentence of the rule (“Any person owning or operating any motor vehicle or motor vehicle . . . in compliance with the Federal motor vehicle rules, shall maintain the system or device in operable condition . . . ”) in concert with the second sentence, such that the “safe harbor” provision (“equally or more effective in reducing emissions from the vehicle to the atmosphere”) is modified to require “compliance with the Federal motor vehicle rules” in the first sentence. SLC Opp’n at 9–10; Tr. of April 21, 2023 Hearing at 9 (“You cannot read the second sentence independently of the first sentence or it doesn’t make sense.”). But nothing in the first sentence requires that “compliance with the Federal motor vehicle rules” be read into

1 the second sentence’s safe harbor, particularly where the two provisions are directed  
2 toward separate entities. Compare Utah Admin. Code § R307-201-4 (“Any person owning  
3 or operating any motor vehicle or motor vehicle engine registered or principally operated  
4 in the State of Utah . . . shall”) with id. (“No person shall . . .”).

5 Contrary to Salt Lake’s argument that such a reading of the rule simply “doesn’t  
6 make sense”—“[t]he fact that VW initially cheated more than others does not give it any  
7 better cheating rights than anyone else”—VW has not been afforded “better cheating  
8 rights” if Utah’s safe harbor protects a software update that causes a decrease in emissions,  
9 even if that decrease still renders emissions above federal standards. SLC Opp’n at 9. The  
10 initial increase in emissions far beyond federal standards—the initial injury for which the  
11 Counties sought redress back in 2016—was expressly preempted by § 209(a) of the Clean  
12 Air Act. In re Volkswagen, 959 F.3d at 1216–18. Thus, the question is not whether  
13 Volkswagen will be held to account for its wrongdoing—indeed, it has been thoroughly  
14 held to account in this litigation. The question is whether Volkswagen may be held to  
15 account for the software updates at issue here. On a plain reading of § R307-201-4, there  
16 is no liability if those updates were “equally or more effective in reducing emissions from  
17 the vehicle to the atmosphere.”

## 18           **2.       Whether the Updates Actually Reduced NOx Emissions**

19 Having determined that no liability attaches under either rule if the software updates  
20 decreased emissions, we finally reach the question at hand: Whether Volkswagen has met  
21 its burden of proof that there is no genuine issue of material fact that the post-sale updates  
22 decreased emissions. The Court concludes that it has.

23 Volkswagen bases its motion off of three PEMS tests of the software updates: (1)  
24 testing conducted by VW in 2014 and presented to CARB and EPA; (2) the incomplete  
25 results from CARB’s 2015 testing to confirm VW’s representations; and (3) the testing  
26 conducted by Exponent and Harrington, the subject of the Counties’ motion to exclude.  
27 See Mot. for Summary Judgment at 5–6, 8–10, 12–19.

The CARB and Exponent testing<sup>8</sup> tells a consistent story that NO<sub>x</sub> emissions were reduced after the updates were installed. While the CARB testing was not fully completed, for the single Gen-2 vehicle where the A-to-B testing was completed on uphill, downhill, inbound, and outbound routes, NO<sub>x</sub> emissions decreased across all routes. Harrington Rep. at 49–50; Menillo Decl. Ex. K. Exponent’s testing—which included seven different vehicles across three routes—showed NO<sub>x</sub> emission reductions across all vehicles and routes, with some vehicles and routes showing significant average NO<sub>x</sub> emissions reductions of 40 to 50 percent. Harrington Rep. at 60–62. The Court is persuaded, based on these overwhelming results, that Volkswagen has carried its burden and demonstrated that NO<sub>x</sub> emissions were decreased as a result of the software updates.

On the other side of the ledger, the Counties provide no evidence that NO<sub>x</sub> emissions were increased as a result of the updates. The Counties repeat the same arguments against summary judgment that they lodge in their motion to exclude, including:

- Harrington “ignored” half of the test results by excluding test runs in which regeneration events occurred, and did not consider “infrequent regeneration adjustment factors,” SLC Opp’n at 12;
- Harrington did not correct for emission concentrations in the ambient air, id. at 12;
- The testing was done at “relatively high, unrepresentative ambient temperatures,” id. at 13;
- There was no check to rule out leaks in the exhaust system before running the tests, id. at 13; and
- Failures to report additional data, such as MIL status, DPF regenerations, and engine-out emissions. Id. at 13.

Neither the Counties nor their experts explain why any of these alterations in the

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<sup>8</sup> The Court does not ascribe any weight to Volkswagen’s initial testing, because Volkswagen did not provide the underlying data to the Court or, as far as it can discern, to the Counties.

1 test plan would have caused the drastically different result—an increase or no change in  
2 NO<sub>x</sub> emissions across vehicles and routes—that they appear to be hoping for. And the vast  
3 majority of these issues—especially the criticism that Harrington “ignored” the test runs in  
4 which regeneration events occurred—could be addressed by the Counties analyzing the  
5 data themselves, which they appear not to have done. When compared to Harrington’s  
6 results—which show uniform and significant reductions in NO<sub>x</sub> emissions across vehicle,  
7 generation, and route—none of these nitpicks, even taken together, suffice to create a  
8 genuine issue of material fact.

9 At bottom, the Counties argue that Volkswagen’s evidence should not be credited  
10 because “any study that is not completely independent of Defendants’ influence is suspect  
11 and cannot provide the basis for summary judgment.” SLC Opp’n at 14; see also EPC  
12 Opp’n at 23 (“[O]ne commonality all of these tests have is that they were either paid for by  
13 VW, involved vehicles provided by VW, or both.”). But this point would have been far  
14 stronger if the Counties had conducted their own testing prior to bringing suit or accepted  
15 Volkswagen’s invitation to delay summary judgment to conduct their own testing. The  
16 Counties cannot complain that Volkswagen is the only party to attempt to verify CARB’s  
17 incomplete results when they have refused their own opportunity to do so.

### 18       3.     **Rule 56(d)**

19 Finally, the Counties argue, under Rule 56(d), that the Court’s decision should be  
20 stayed pending further discovery. Because the Counties fail to pinpoint specific facts that  
21 further discovery would elicit, the Counties’ requests for further discovery are denied.

22       “To prevail on a request for additional discovery under Rule 56(d), a party must  
23 show that ‘(1) it has set forth in affidavit form the specific facts it hopes to elicit from  
24 further discovery; (2) the facts sought exist; and (3) the sought-after facts are essential to  
25 oppose summary judgment.’” Midbrook Flowerbulbs Holland B.V. v. Holland Am. Bulb  
26 Farms, Inc., 874 F.3d 604, 619–20 (9th Cir. 2017) (quoting Family Home & Fin. Ctr., Inc.  
27 v. Fed. Home Loan Mortg. Corp., 525 F.3d 822, 827 (9th Cir. 2008)).

28       Neither County has set forth “specific facts” further discovery would elicit.

1 Hillsborough fails to set forth any facts at all, instead citing the short discovery period and  
2 abundance of documents produced by Volkswagen. Gould Decl. (dkt. 8039-1). Salt Lake,  
3 too, fails to set forth any proposed “specific facts” in their amended declaration, merely  
4 stating that the time allotted for discovery was insufficient. Simmons Decl. (dkt. 8135-1).

5 In its prior declaration in support of its initial opposition, Salt Lake proposed  
6 discovery into analysis of the software code, the opportunity to pursue additional testing,  
7 and depositions of fact witnesses. Ostler Decl. (dkt. 8043-9). None of these proposals set  
8 forth any facts that this discovery would elicit that would preclude summary judgment:  
9 First, further discovery into the software code does not alter the fact that Volkswagen has  
10 met its burden that the post-sale updates decreased NO<sub>x</sub> emissions. Second, Salt Lake does  
11 not specify which depositions of fact witnesses they seek, rendering their request  
12 hopelessly vague. And third, while additional testing might elicit additional facts relevant  
13 to summary judgment (though Salt Lake does not indicate what those facts might be) this  
14 request fails for the simple reason that they have refused the opportunity to conduct  
15 additional NO<sub>x</sub> testing, as offered by Volkswagen in the past. See dkt. 8044-2, 8044-3,  
16 8044-4. To the extent Salt Lake seeks discovery into non-NO<sub>x</sub> emissions, that request has  
17 already been denied in prior proceedings. See Order on Mot. to Exclude; Order Denying  
18 Mots. to Amend.

19 That leaves only the Counties’ concerns about the volume of documents produced  
20 by Volkswagen and the insufficient time they were given to review them and conduct  
21 expert and fact discovery. See Gould Decl. ¶¶ 4–5, 10–12; Ostler Decl. ¶¶ 10–14;  
22 Simmons Decl. ¶¶ 5–6. Even if this request had merit back in September, it no longer  
23 does. Due to the delay in summary judgment briefing while the parties’ briefed the  
24 Counties’ motions for leave to amend, the Counties were afforded an additional five  
25 months to review Volkswagen’s productions with their experts. More time for discovery is  
26 not warranted when, at least as their declarations indicate, the Counties have failed to take  
27 advantage of the additional time they have already received.

1           **IV. CONCLUSION**

2           For the foregoing reasons, the Counties' motion to exclude is DENIED, and  
3 Volkswagen's motion for summary judgment is GRANTED.

4           **IT IS SO ORDERED.**

5           Dated: June 22, 2023



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6           CHARLES R. BREYER  
7           United States District Judge